From boatanchors@theporch.com Tue May 2 02:03:57 1995
Date: Mon, 1 May 1995 21:03:57 -0500
Message-Id: <2FA590C6@msmail.oafb.af.mil>
From: "Lazaroff, Michael S., MSgt" <LAZAROMS@quasar.oafb.af.mil>
Subject: 120 vs. 240 v. power

>as a point of interest, I asked an engineer at the power company where I work
>why the line voltage tended to run 122+ around here. I was pressed for time
>so couldn't ask many questions, but he mentioned someting about making it
>easiser to deal with reactive customer loads with poor power factors.
>(Probable translation- we sell more power that way, stupid!) The Colorado
>state utility commission allows 120 volts, + or - 5%, so I suppose I'm lucky
>not to have to deal with 126 volts.   73 <bill>

OK, I have a question...why is a lot of the rest of the world on 220/240 volts
and the US is on +/- 120 v?   I know it's easier to transport the higher
voltages, so how did we end up with 120? Just curious...I've wondered
about this for a little while <g>.   Anybody know the history behind it?

From boatanchors@theporch.com Sun Apr 30 23:59:27 1995
Date: Sun, 30 Apr 1995 18:59:27 -0500
Message-Id: <9504300100.AA12303@kali>
From: Andy Wallace <wallace@mc.com>
Subject: 3-band SSB (National NCX-3)

Speaking of 3-banders... I have an opportunity to get a National
NCX-3 from a local ham friend. How is this rig? Any bugs to watch
out for, weird rare tubes, missing features? I like the style of
the rig, but then if I do get it, it would be the newest National
in the shack; I mean youngest! <grin>

I also like the digital odometer dial of the NCX-5.

--Andy

From boatanchors@theporch.com Mon May 1 12:51:11 1995
Date: Mon, 1 May 1995 07:51:11 -0500
Message-Id: <Pine.SUN.3.91.950501073447.23493C-100000@eiger.ceet.niu.edu>

From: Steve Berg <berg@eiger.ceet.niu.edu>
Subject: Re: 3-band SSB (National NCX-3)

They are a whole lot of fun. I have both an early NCX-3 and a much later NCX-5. The 3 works well on SSB, but mine lacks any rit feature so CW does not have an offset. I still use it on CW, but it can be awkward. The rig works great otherwise. The NCX-5 gets more use, because I am mostly on CW, and that rig has features that are more conducive to fine performance on that mode.

73,

Steve WA9JML

From boatanchors@theporch.com Mon May 1 20:56:32 1995
Date: Mon, 1 May 1995 15:56:32 -0500
Message-Id: <"Macintosh */PRMD=MOT/ADMD=MOT/C=US/"@MHS>
From: Scott_Johnson-AZAX60@email.sps.mot.com
Subject: RE>4-65 and 4PR65 power tub

RE>4-65 and 4PR65 power tubes 5/1/95

The 4-65 is the smallest member of the Eimac glass tetrode group, and was used in the PRC-47, ARC-21, and ARC-65. The 4PR-65 is a radar hard tube modulator tetrode used in the APN-69 RADAR beacon. It shares no characteristics with the 4-65 other than plate dissipation and the fact that it is a tetrode. Other members of the family, such as the 4-1000/4PR-1000 are very similar, with the pulse versions subject to extra care in manufacture to ensure anode concentricity, which allowed better current sharing (important with high peak currents in RADAR and LASER modulator service.)

-

From boatanchors@theporch.com Mon May 1 19:59:42 1995
Date: Mon, 1 May 1995 14:59:42 -0500
Message-Id: <199505011944.PAA28122@service1.uky.edu>
From: wlfuqu00@service1.uky.edu (Bill Fuqua)
Subject: 4-65 and 4PR65 power tubes

Does anyone have any info on the 4PR65 power tube? What is the difference between the 4-65 and 4PR65?

Bill ko4ww

William L. Fuqua III P.E.
Department of Physics and Astronomy
CP-177 Chem. Phys. Bldg.
University of Kentucky
Lexington, Ky 40506-0055
E-mail WLFUQU00@POP.UKY.EDU

From boatanchors@theporch.com Tue May 2 07:38:04 1995
Date: Tue, 2 May 1995 02:38:04 -0500
Message-Id: <2FA669CA@msgw.isoft.intranet.gr>
From: Sifakis George <sifakis@isoft.intranet.gr>
Subject: RE: 4-65 and 4PR65 power tubes

| Does anyone have any info on the 4PR65 power tube? What is the difference
| between the 4-65 and 4PR65?
|
| Bill ko4ww

I seem to remember the PR standing for Pulse service for use in radars and
the ratings to be up to the Megawatts for those tubes! I'll try to check it
out.

George   SV0KA

From boatanchors@theporch.com Mon May 1 20:24:07 1995
Date: Mon, 1 May 1995 15:24:07 -0500
Message-Id: <199505012010.QAA06939@bear.MOTOWN.GE.COM>
From: "S. Miller" <smiller@motown.ge.com>
Subject: 4PR65

I'd like to see an answer to that question as well. I have a pulse raitng chart
from
Eimac but it does not say why the tubes such as a 4pr400 is any different than a
4-400.
About the best I ever came up with was that the pr tubes were handpicked and
tested to
the pulse ratings. Otherwise they are the same and perfectly useable for ham
service.
Steve KD2ED

From boatanchors@theporch.com Sun Apr 30 23:51:31 1995
Date: Sun, 30 Apr 1995 18:51:31 -0500
Message-Id: <950429193855_74723.2416_EHL64-1@CompuServe.COM>
From: "Linton G. & Cheryl K. Robert" <74723.2416@compuserve.com>
Subject: Apache/Mohawk Twins for sale

Have a set of Heathkit twins, the Mohawk and the Apache receiver/transmitter combo w\ssb adapter, docs, etc....both in pretty fair shape...they were running as late as January....would prefer someone in So. Calif to come and pick them up, if possible! The XMTR is 100Lbs, and I barely can move it alone! $65 and it's all yours.

-Lin Robertson (San Diego)

CompuServe 74723,2416

From boatanchors@theporch.com Tue May 2 01:08:43 1995
Date: Mon, 1 May 1995 20:08:43 -0500
Message-Id: <0098FB6EDD97B0E0.2061EB63@mwk.com>
From: "Lee K. Gleason" <gleason@mwk.com>
Subject: Boatanchor sighting...

I was watching a kid's show about science today. They were talking about the search for extraterrestrial via radio telescope. They traveled to Arecibo, and were showing the control room. THe commentator pointed over to a wall of equipment in racks, and, just as he was saying "Over here is one of the most complicated and sophisticated radio receivers in the world", the camera zoomed in...and there, in the middle of all of this space age gear, almost centered in the shot, was an R-390! I'm sure that the commentator was referring to the whole wall o' gear, but, her was dead on in either case!

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

From boatanchors@theporch.com Sun Apr 30 22:35:13 1995
Date: Sun, 30 Apr 1995 17:35:13 -0500
Message-Id: <Pine.3.89.9204290828.A17079-0100000@mm1001.theporch.com>

From: Kevin J Pease <kevin@mm1001.theporch.com>
Subject: Re: Boonton RX meter--arrrgggh!

Is there room inside for a small 6.3 volt transformer. The surrent draw is pretty low. The transformer could be pretty small

Kevin J Pease
WB0JZG Mt Juliet, TN.
mm1001.theporch.com

From boatanchors@theporch.com Mon May 1 14:12:58 1995
Date: Mon, 1 May 1995 09:12:58 -0500
Message-Id: <199505011405.KAA01500@shiva.shiva.com>
From: John Shriver <jas@shiva.com>
Subject: Re: Boonton RX meter--arrrgggh!

Rectify the 13.5 VAC winding into DC. With that much voltage to spare, half-wave rectification would probably do, with a modest filter cap. Put a fat dropping resistor in, and then put a 6.3 V Zener diode across the tube filaments.

Or, use a 3-terminal regulator to drop to 6.3 V, and let it generate all the heat. Well, probably still need a dropping resistor.

Might even be able to do it in a module that plugs in where the 6H-6 goes.

Probably will improve performance slightly, less heater hum running around, so long as you don't get any HF noise from the recitifiers charging the cap.

I don't think the ballast was providing a controlled warmup. Heck, you want the filaments hot fast, before the B+. Otherwise you get cathode stripping. (Maybe it even heated them up faster?) Most likely it was regulating the filament voltage. Stabilizes the oscillator gain, and probably frequency.

From boatanchors@theporch.com Sun Apr 30 22:16:31 1995
Date: Sun, 30 Apr 1995 17:16:31 -0500
Message-Id: <199504291144.GAA00355@uro.theporch.com>
From: bgraham@tecnet1.jcte.jcs.mil
Subject: Re: Buy receivers, build transmitters, philosophy

Well, I wasn't around before WWII but my first ham reeiver was a Heath
HR10andmy first xmitter was a handbook design. Wish I still had both.
Sold the receiver my first trip to Dayton and gave the xmitter
to a young novice.

73

Bill

From boatanchors@theporch.com Mon May 1 02:29:15 1995
Date: Sun, 30 Apr 1995 21:29:15 -0500
Message-Id: <199505010154.SAA12520@netcom2.netcom.com>
From: rmccarty@netcom.com (roger mccarty)
Subject: Collins 30L1; Value?

I may have a line on a number of 30L1's (winged emblem). I have yet to
confirm, but
intend to drive to see them on short order. Can someone help me with a
value on these units? Also, if anyone else is interested, I will e_mail
condition and price once I have had the opportunity to check them out.

Roger KD6CC

From boatanchors@theporch.com Mon May 1 16:14:00 1995
Date: Mon, 1 May 1995 11:14:00 -0500
Message-Id: <199505011607.AA18376@interlock.wdni.com>
From: "Turini, Bill" <turinib@wdni.com>
Subject: Collins 516F-2 question

The Collins change notices for the 516F-2 power supply recommend replacing
the tubes with SCH-5000 diodes. I've looked in several cross reference
books and can't find any replacement diodes. Does anyone have any info on
this?

thanks

Bill KA4GAV/7   turinib@wdni.com
Weyerhaeuser   (206)924-5890

From boatanchors@theporch.com Mon May 1 19:20:51 1995
Date: Mon, 1 May 1995 14:20:51 -0500
Message-Id: <199505011911.PAA06841@bear.MOTOWN.GE.COM>
From: "S. Miller" <smiller@motown.ge.com>
Subject: re:collins 516f-2 question

The Semtech manual shows the sch-5000 diode as the following:
High voltage rectfier assembly with the following specs:
Working reverse voltage:5000
I forward:.5A @55C
1 cyclce surge 50 amps
repetitive surge 10 amps
case length 1.145 inches.
There's more if you want to get into the nitty gritty but that should get things rolling.
Steve, KD2ED

From boatanchors@theporch.com Mon May 1 00:33:18 1995
Date: Sun, 30 Apr 1995 19:33:18 -0500
Message-Id: <Pine.SUN.3.91.950430083528.16157A-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: COMMAND SET Demonstrator Boards

The text SIGNAL SECTION, AIR SERVICE COMMAND, CIVILIAN MAINTENANCE TRAINING, BASIC RADIO INSTRUCTOR MANUAL VOLUME 1 shows SCR-274-N "Demonstrator Boards" used in maintenance training. The receiver board required stripping a BC-454 and its BC-450 remote control; the transmitter board required a BC-457, the BC-451 control, BC-442 antenna relay, and BC-456 modulator. The new instructor was supplied with two 28 by 44-inch printed covers with large schematics, and was apparently expected to take them back home, acquire matching 1/4-inch sheets of plywood, and build the demonstrators. Important components (tubes, i.f. cans, tuning capacitor, bypass capacitors, dynamotor, etc. were mounted on the face of the board. The remainder of the components were installed on the back and wired in. The schematic had test points embedded at both ends of each component, sometimes with short jumpers that could be disconnected to show the effect of an open component. They used black bakelite flange pin jacks, Eby No. 52, ARBCO No. 138, Mallory No. 521, "or similar" and bakelite handle test pins to fit the jacks, to accomplish this.

Has anyone ever seen one of these boards? Or maybe just the print for one? That would be a helluva neat way to present Command Sets! What a start for a Command Set training video (hint...hint...for you video tech freaks).

Ray Mote, W6RIC (805) 985-6048

From boatanchors@theporch.com Sun Apr 30 23:06:34 1995
Date: Sun, 30 Apr 1995 18:06:34 -0500
Message-Id: <Pine.SUN.3.91.950429073442.10401A-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: COMMAND SET DOCUMENTATION

The following list is incomplete, but it ought to get you started in the right direction:

AN 08-10-195	HANDBOOK OF MAINTENANCE INSTRUCTIONS FOR MODEL AN/ARC-5 AIRCRAFT RADIO EQUIPMENT, VOLUME 2 VHF COMPONENTS, 15 APRIL 1944
AN 16-30ARC5-2	HANDBOOK OF MAINTENANCE INSTRUCTIONS FOR MODEL AN/ARC-5 AIRCRAFT RADIO EQUIPMENT LF MF HF COMPONENTS, 23 FEBRUARY 1944, REVISED 15 JUNE 1945
NAVAER 08-5Q-95	HANDBOOK OF OPERATING INSTRUCTIONS FOR MODEL AN/ARC-5 AIRCRAFT RADIO EQUIPMENT, 21 FEBRUARY 1944
T.O. 08-10-50	INSTRUCTION BOOK FOR OPERATION AND MAINTENANCE OF RADIO SET SCR-274-N, 15 FEBRUARY 1943
T.O. 16-40SCR274-5 (old T.O. 16-10-50)	RADIO SET SCR-274-N, 15 FEBRUARY 1943
(no number)	FIRST EDITION OF FINAL INSTRUCTION BOOK FOR MODEL ATA AND MODEL ARA AIRCRAFT RADIO TELEGRAPH AND TELEPHONE TRANSMITTING AND RECEIVING EQUIPMENT, Aircraft Radio Corporation, Boonton, NJ, Contract NOs-74912, dated June 29, 1940
(no number)	SIGNAL SECTION, AIR SERVICE COMMAND, CIVILIAN MAINTENANCE TRAINING, BASIC RADIO INSTRUCTOR MANUAL, VOLUME 1, dated 20 August 1943. (Printed at Wright Field 8/7/43 in 500 copies)
NAVAER 08-1-504	AIRBORNE RADIO MAINTENANCE NOTES (RESTRICTED section), dated 1943
NAVAER 08-1-505	AIRBORNE RADIO MAINTENANCE NOTES (CONFIDENTIAL section), dated November 1945

In general, check the T.O. 00-1 series for Air Corps equipment, and NAVAER

00-500 (available at high cost from the National Archives) for airborne Navy equipment. Signal Corps document lists can be found in a microfiche series (M-1641 I think) from the National Archives -- the series is 39 reels long, but you only need the first three for WW2, and they're available singly. The T.O. 16-55- series is spare parts list for equipment (not all that useful). Also see:

NAVAER 16-5Q-517	ELIMINATION OF RADIO INTERFERENCE IN AIRCRAFT, dated 1 March 1946.
T.O. 16-40-2	REDUCTION OF PRECIPITATION STATIC - SCR-183 SERIES, SCR-283 SERIES, SCR-274-N, BC-348-J, BC-348-N, AND BC-348-Q, dated 16 March 1945.
T.O. 30-20FC-2	INSTRUCTOR GUIDE, GENERAL AIRBORNE RADIO MAINTENANCE, dated 1 June 1944. (SAAMA - the San Antonio Air Materiel Area reprinted this in 2,000 copies in 1948)
(no number)	AIRCRAFT RADIO, by Aircraft Radioman Training Unit, Fleet Air Wings Atlantic Fleet, undated.
(no number)	AIRCRAFT RADIO (First Edition), Radio Materiel School, Naval Research Laboratory, Anacostia Station, dated 20 August 1936.

The Philco TechReps had a series of bulletins available to them in the field, covering a wide range of equipment. I recall seeing the AN/ART-13 in there, but not Command Sets. It is possible that these were also covered (my collection is woefully incomplete/inadequate).

From boatanchors@theporch.com Sun Apr 30 23:29:16 1995
Date: Sun, 30 Apr 1995 18:29:16 -0500
Message-Id: <Pine.SUN.3.91.950429082337.16240A-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: COMMAND SET DOCUMENTATION

This really addresses both your question and N5OFF's query, so will combine. Gordon Elliot White (still alive and kicking, chasing antique racing cars the last I heard) wrote a number of articles dealing with various aspects of Command Sets:

CQ MAGAZINE articles:
  Nov 64 The Command Set Story
  Oct 65 Command Sets

Mar 66 Surplus - ARR-2, ZB, etc.
Jan 67 Command Sets for All Frequencies
Mar 67 Surplus Korean War Sets
Apr 67 Surplus (Converting the R-23)
Jun 68 Surplus (Lorenz conversion)
Sep 68 Surplus (the T-11B)
Dec 70 Surplus (mentions the Lewyt production of Command Sets for the Korean War)
Sep 71 Surplus (VHF Command Sets)
Apr 72 Surplus (More VHF Command Sets)
May 72 Surplus (More on VHF Command Sets)
Mar 75 Surplus (Command Set History)
Apr 75 Surplus (ARC-5 Transmitters)
Aug 75 Surplus (pin connections for Command Sets)

73 MAGAZINE:
Feb 66 C-131/AR ARC-5 Autotune setup
Jun 66 First And Last Q-5'er

Additional military documentation I forgot to list in my last post:

T.O. 12R2-3SCR274-14 Spare Parts List for SCR-274-N (formerly T.O. 16-55-109), dated 25 November 1944, revised 3 December 1951, reprinted 7 November 1956. Wish I had a copy.

T.O. 12R-3SCR274-2 Handbook of Maintenance Instructions, SCR-274-N (formerly T.O. 16-40SCR274-5), dated 15 February 1943, revised 25 July 1956, reprinted June 1961. (Would love to have this one also!)

From boatanchors@theporch.com Mon May 1 00:14:58 1995
Date: Sun, 30 Apr 1995 19:14:58 -0500
Message-Id: <Chameleon.4.01.2.950429225914.jproc@>
From: jproc@worldlinx.com
Subject: Command Set Documentation

Jack,

I'm not sure of exactly what original documentation you are seeking but I have the B24 Liberator Radio Systems Service and Installation Manual from 1942. I was going to donate it to a museum, but I changed my mind as I felt it might be potentially useful to field Command and Liason Set questions that may arise from the group. There are 21 pages in the Command Set section (SCR-274), 4 of which are fold out pages. Here is a description of the fold outs:

Command Receiving Equipment - Shows the schematic of the BC455 with a parts list and the interconnections to the BC 450 Control Box.

Command Transmitting Equipment - Shows the schematic of the BC45x transmitter and has a parts list for the BC457, 458, 459. Has schematics and interconnections between the BC45x transmitter, the BC451 control box, BC 456 modulator, and BC442 antenna relay unit.

Command Set Cording Diagram - Shows the interconnections between all the componets of a Command Set System.

Cords and Tuning Shaft drawing.

The rest of the pages contain operating instructions as if you were actually in the aircraft. There are no alignment instructions in this book for Command Set equipment. If you, or any other members in the group might find this material useful, drop me an E-mail so I can do a head count. If there is enough interest, I can get a package made up and it should cost $5 US or less to cover copying and postage. I must forewarn everyone that the printing in the book is very close to the binding, so one edge of the copy will have curvature. I must handle this book with great care for the obvious reasons.

Regards,

Jerry Proc   VE3FAB
E-mail: jproc@worldlinx.com
Radio Restoration Volunteer
HMCS Haida Toronto, Ontario

From boatanchors@theporch.com Tue May 2 06:36:36 1995
Date: Tue, 2 May 1995 01:36:36 -0500
Message-Id: <93121.ddillman@igc.apc.org>
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: CR-88A Trade - Want List

Greetings:

I have an RCA CR-88A, available for trade up or down for another interesting receiver, civilian or military, in good condition.

The CR-88A is in good, clean operating condition. Some small front panel paint chips, mainly around rack mounting screw holes, no cabinet.

I'm particularly looking for:

SX-28A
GPR-90

Best Regards,

Dick Dillman

From boatanchors@theporch.com Mon May 1 22:20:18 1995
Date: Mon, 1 May 1995 17:20:18 -0500
Message-Id: <199505012202.AA15443@interlock.wdni.com>
From: "Turini, Bill" <turinib@wdni.com>
Subject: CU-421/SRA-15 Antenna Coupler

While cleaning out the garage I found a real Boatanchor, a

CU-421/SRA-15 Antenna Coupler

as the name tag says. 19" rack mount, 3/8" aluminum plate chassis, antenna current meter, vacuum variable cap, and the wierdest output coupler I've seen - a coil rotating within another coil.

Any help on what this is/is used for/manual/can I use it on the ham bands, etc.

Thanks

Bill

From boatanchors@theporch.com Sun Apr 30 22:25:52 1995
Date: Sun, 30 Apr 1995 17:25:52 -0500
Message-Id: <199504291145.GAA00363@uro.theporch.com>
From: bgraham@tecnet1.jcte.jcs.mil
Subject: Re: Cubic/Mil ham gear

Interestingly enough, many National Guard armorys in many states
used to have HF rigs and run HF contingency nets. A lot
of them had Swan/Cubic xcvrs of the standard ham kind.

When I worked at our Ft Lewis regional office I had requests
for the Guard maintenance shops in a couple
of states asking for parts info or manufacturer
address... and as I remember there is a successor company
for Swan that still has manuals (but I don't have the info
here in Germany with me).

Bill

(soory about editing, line is noisy today)

From boatanchors@theporch.com Mon May 1 23:03:27 1995
Date: Mon, 1 May 1995 18:03:27 -0500
Message-Id: <799367885.5489279@AppleLink.Apple.COM>
From: FRANCIS4@applelink.apple.com (Francis, Dexter)
Subject: diode substitutions for tubes

I seem to recall that some companies actually produced modules that did just this. Don Merz had some for sale recently, but I'm not sure which tubes they substituted for.

-df

From boatanchors@theporch.com Mon May 1 23:41:22 1995
Date: Mon, 1 May 1995 18:41:22 -0500
Message-Id: <199505012312.AA05734@interlock.wdni.com>
From: "Turini, Bill" <turinib@wdni.com>
Subject: RE: diode substitutions for tubes

Well, I appreciate all the responses to my post, and I have a few questions of clarifications and comments:

1. Given all the (valid) bad comments about replacing tubes with diodes, does anyone know why Collins would recommend such a modification?

2. My local surplus store has a pile of these diode replacement "tubes" for $15.

3.   My Signal/One CX7 uses a "Surgistor" (?) to control inrush current.
 Any other
     radios use this?

Thanks for all the responses, it's been enlightening.

Bill KA4GAV/7   turinib@wdni.com
Weyerhaeuser

From boatanchors@theporch.com Tue May 2 00:08:10 1995
Date: Mon, 1 May 1995 19:08:10 -0500
Message-Id: <98794@w5ddl.aara.org>
From: n5off@w5ddl.aara.org
Subject: Diodes/Variac

I use a variac on my BA power strip to baby all the rigs. The R-390A had
diode rectifiers. I simply take 2-3 sec or so to bring the voltage
up from 0 to 110V, and everthing is cool (I think).

Thanks for the variac, Roy.

OOPS, that should read "R-390A has diode . . ."

73 de tom

From boatanchors@theporch.com Mon May 1 01:00:59 1995
Date: Sun, 30 Apr 1995 20:00:59 -0500
Message-Id: <799283172.9005472@AppleLink.Apple.COM>
From: FRANCIS4@applelink.apple.com (Francis, Dexter)
Subject: Drake VFO output

While we're on the subject of modifing Drakes, has anyone seen any info on
adding the capability to patch the VFO from the SPR-4 to a 4 series TX?
There are "extra" holes in the back panel on the SPR-4, but mine aren't
populated.

-df

From boatanchors@theporch.com Mon May 1 14:29:59 1995
Date: Mon, 1 May 1995 09:29:59 -0500
Message-Id: <199505011421.JAA19659@audumla.students.wisc.edu>
From: cmthomp1@facstaff.wisc.edu (Clark M. Thompson)
Subject: Re: Drake VFO output

>While we're on the subject of modifing Drakes, has anyone seen any info on
>adding the capability to patch the VFO from the SPR-4 to a 4 series TX?
>There are "extra" holes in the back panel on the SPR-4, but mine aren't
>populated.
>
>-df

My SPR-4 came with an optional board installed which allowed it to tranceive wit the T4XB. I believe it is called the TA-4 (I'm at work now so I can't check). It accepts the local ocillator signal from the transmitter by plugging into one of the SPR-4's crystal sockets. It included a decal marked with the ham bands which went over the SPR-4's 1-10 preselector scale. I'm not sure if it's the SPR-4's VFO or the T4XB's VFO that is used for transceive. I've never used it. I don't have a T4XB, although It's my list of things I'd like to acquire. I hope this helps.

73,

Clark, KD9QI

From boatanchors@theporch.com Mon May 1 11:30:29 1995
Date: Mon, 1 May 1995 06:30:29 -0500
Message-Id: <9505011122.AA12955@kali>
From: Andy Wallace <wallace@mc.com>
Subject: Re: Drake VFO output -- SPR-4

I don't have a reference handy, but I am pretty sure that was the TA-4. It was a "transmitting adapter" for just such a thing. I believe there was also an RY-4 RTTY adapter. Another rare adapter was the "FF-1" fixed frequency adapter for the TR-4. I've never seen one but I looked in a TR-4 manual and it seems that you bolted some controls to the underside front of the chassis for that one!

Anyway, it will probably be tough finding a TA-4. Maybe some List members can get you the schematic.

--Andy

P.S. -- Larry Keith, are you still on the List? And are you still maintaining
that Drake List (of equipment)?

From boatanchors@theporch.com Mon May 1 15:16:10 1995
Date: Mon, 1 May 1995 10:16:10 -0500
Message-Id: <950501110939_102578812@aol.com>
From: CarlHeintz@aol.com
Subject: Drakes for Sale

The following are in super fine condition.

TR-4 +MS-4+D104 mike, a beautiful rig that performs nicely $250

T4X+R4B+MS-4+D104 mike - with manuals, all new cables,
  in outstanding electrical and mechanical condition $300

From boatanchors@theporch.com Sun Apr 30 22:44:12 1995
Date: Sun, 30 Apr 1995 17:44:12 -0500
Message-Id: <9504291139.AA18380@mirage>
From: mirage!pamars@uhura.neoucom.EDU (P.A.Marshall)
Subject: RE: EchoPhone Radios??

Gable, Edward M writes:
>
> Dave: There are two Echophone series. One is a series of three
> metal cased shortwave/Ham receivers of very late 30's and 1940's,
> there were models EC-1, EC-2 and EC-3. The other series were
> early battery operated broadcast radios of the 20's. Which do you
> have ? I have all three EC's in my colection and some docs.
>

This exchange promped me to do a little research on Echophone, of
course we all know about the EC-1, EC-2, EC-3, Moore also mentions
the EC-4, EC-6, EC-113, but Sams also lists the following: EC-306,
EC-403/4, EC-500, EX-102/3, EX-306 (same photofact as EC-306), and
lastly, in 1957 the TR-11. These are all Hallicrafter sets, in addition Rider lists 39 (if I counted correctly) pre-Hallicrafter sets.

Al Marshall   "Real Radios Glow in the Dark"   almarshall@acm.org

"You road I enter upon and look around, I believe
          you are not all that is here,
     I believe that much unseen is also here."

From boatanchors@theporch.com Tue May 2 03:11:21 1995
Date: Mon, 1 May 1995 22:11:21 -0500
Message-Id: <199505020300.AA17120@shore.shore.net>
From: Michael Crestohl <mc@shore.net>
Subject: Re: establishing boat anchor values!

Hello fellow heavy metal enthusiasts!

Cynthia and I had a fine time at Dayton - weather was perfect for a change (unlike the past several years :^). I met a couple of our more prominent personalities like Jack Hill W4PPT, Larry Keith KQ4BY and Bill Strangfeld WB8YUW. I also picked up a few choice boatanchor pieces that I found before the Mongol hoards roared through the flea market!

Looking at the loot I hauled home I am pleased to report that only one piece (a digital voice keyer) doesn't qualify for boat anchor status - well I guess the military Bird mini Thru-line 10/100 W wattmeter doesn't qualify either ;^). But its all good stuff. By the way, does anyone know about the pinouts on the plug on the Collins 180L3 I bought? Is it practical to try to use this thing or grab the vaccuum variable and roller inductor and build around it? Anyone got a schematic?

Anyways, I came home to find a request from Dave (jodaanve@aol.com) about pricing some boat anchors for his buddy:

Message contains:
To: jodaanve@aol.com
Subject: Your post ref: boatanchors for sale

Hello:

Your request for a fair market value is difficult to comply with without seeing the equipment.

The Johnson Navigator without the original meter is worth much less than a complete unit. Cosmetic condition is very important in determining value. Has it been fired up lately? Can you give me more information on its condition?

May I make a suggestion? You can offer these items to the highest offer with the understanding that it would be subject to inspection by the buyer. If he/she wasn't satisfied they could return it within x days and receive a refund minus shipping costs. It could then be offered to the next highest bidder under the same conditions. I know that its a bit cumbersome this way but at least it would provide a somewhat accurate indication of what that radio was worth to the person who kept it!

Cordially,

Michael Crestohl KH6KD/W1
mc@shore.net

--end of quoted message---

On another subject I was happy to run into ELECTRIC RADIO's publishers, Barry and Shirley Wiseman whom I met last year. They're fine folks and seeing them again was a major highlight of the fest. I was very pleased to see a nice 2-B with the speaker/Q-multiplier Barry picked up earlier on Friday (he got a great deal!) Saturday I passed by their booth again and spotted an older ITT-MacKay marine receiver sitting there. I'm happy to see that Barry was able to grab some goodies for himself in the flea market - manning a booth at Dayton certainly deserves some rewards!

Next year we should try to find a good place to get together - maybe piggy-back a meeting with one of the high profile groups at their hospitality suite downtown at Stouffer's. The DX group might be suitable for this purpose - there are always so many diverse folks at that one that they would never know our real purpose for being there ;^). The DXers are probably a better bet than the contesters - who all know each other anyways and, besides, its better to lock them all up in a room anyways - at least the bands will be rid of them all for at least three days.

It was just great - and now that we're home and recuperating from the long journey .....let's plan for 1996!

Cordially,

Michael Crestohl KH6KD/W1
mc@shore.net

From boatanchors@theporch.com Tue May 2 06:29:09 1995
Date: Tue, 2 May 1995 01:29:09 -0500
Message-Id: <93112.ddillman@igc.apc.org>
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Free BC-610 Xtal

Decided to catalog a 20 year collection to tubes tonight. Way down in the carboniferous layers I found a BC-610 crystal from... who knows where?

Holder: FT-171-B
Freq : Marked 3878.75 Kc/s on side, 3840.00 Kc/s on top

Free to a BC-610 op who will give it a good home.

Advise name and address and it's on its way to you.

Regards,

Dick Dillman

From boatanchors@theporch.com Mon May 1 03:38:30 1995
Date: Sun, 30 Apr 1995 22:38:30 -0500
Message-Id: <199505010318.UAA25581@hobbes.UCSC.EDU>
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: horrid thought

Just recently I was saying we need to think about how we are going to keep the boatanchors alive when vacuum tubes are no longer available. Well today it came to me in a flash. A round package with a plug on one end, and inside are one or more A/D converters, a microprocessor, one or more D/A converters, and I'm still not sure what kind of part that can stand a few hundred volts. Maybe some kind of D/A built on the chip of power FETs. And a power supply to run it all.

Gee, we could make one of these with a transfer function identical to that of a 300-B triode. Would the audiophiles be able to hear the difference?

From boatanchors@theporch.com Mon May 1 15:30:57 1995
Date: Mon, 1 May 1995 10:30:57 -0500
Message-Id: <2FA5246D@vax-flcgr.stpete.honeywell.com>
From: "Stiles, Bruce T (FL40)" <Tom.Stiles@stpete.honeywell.com>
Subject: HQ-170A

I am restoring a HQ-170A receiver and noticed the switch on the clock is broken. There appears to be a tab that goes down inside the clock that has broke loose from the ON-AUTO-OFF switch. Does anyone know how this is connected (or was connected in this case)?

Any help will be greatly appreciate.

Tom

tom.stiles@stpete.honeywell.com

From boatanchors@theporch.com Mon May 1 20:06:28 1995
Date: Mon, 1 May 1995 15:06:28 -0500
Message-Id: <199505011948.PAA28617@service1.uky.edu>
From: wlfuqu00@service1.uky.edu (Bill Fuqua)
Subject: HW-7 and HQ-110 Manuals

Thanks for the manuals. I have what I need now and really think this is a great group of folks.

Also, What is the difference between the HQ-110 and HQ-110A. Just picked up a HQ-110 up in Dayton.

Bill ko4ww

William L. Fuqua III P.E.
Department of Physics and Astronomy
CP-177 Chem. Phys. Bldg.
University of Kentucky
Lexington, Ky 40506-0055
E-mail WLFUQU00@POP.UKY.EDU

From boatanchors@theporch.com Sun Apr 30 23:44:08 1995
Date: Sun, 30 Apr 1995 18:44:08 -0500
Message-Id: <950429151636_100821993@aol.com>
From: Jodaanve@aol.com
Subject: Items for sale-need pricing

I have a number of items for sale, but first need to establish fair market prices. Most of these units are from a fellow ham who is in poor health and has requested that he not be involved in their disposal. To conserve bandwidth, information on pricing, offers to purchase,or requests for further information should be sent via e-mail to jodaanve@aol.com. Once a fair market value is established, the best offer will be accepted and individuals contacted to arrange for payment and preferred method of shipment. This is not an auction! Requests for best current offer or multiple bids on the same items by the same individual will be ignored. With your help, I will be able to liquidate this equipment quickly and fairly.

EQUIPMENT FOR SALE:

DRAKE R4A RECEIVER GUD CONDX W/MANUAL
DRAKE 2NT XMITTER VG CONDX W/SCHEMATIC
KNIGHT V107 2/6M VFO VG W/MANUAL
HEATH HO-13 PANARAMIC ADAPTER VG W/MANUAL
JOHNSON NAVIGATOR XMITTER NEEDS METER W/MANUAL
JOHNSON MODEL 122 VFO MODIFIED
HRO MODEL 5 DIAL DRIVE MECHANISM AND CAPACITORS
2 COLLINS DIAL MECHANISMS MAY BE FOR 32V/75A1?
STANCOR ST-202 CW XMITTER VG W/20,40,80M COILS/MANUAL
HALLICRAFTERS HA-5 VFO VG W/MANUAL

I am also interested in buying or would consider a trade for a clean Hammurlund HQ-100 and would like to thank everyone in advance who responds with offers or pricing information.

Dave Milke- WB9EGZ

From boatanchors@theporch.com Mon May 1 04:01:50 1995
Date: Sun, 30 Apr 1995 23:01:50 -0500
Message-Id: <199505010353.WAA26156@quake.xnet.com>
From: mshaum@xnet.com (Mark Shaum)
Subject: Leakage in IF cans?

Ran into an interesting problem with my R-100A this weekend. After the usual cleaning/oven bake etc, the AM detector ceased to function properly. Some investigation showed that the primary of the last 455khz IF can apparently had a leakage path of some sort to the secondary. With the secondary open circuited, the winding would rise to the same DC potential as the primary (180V, the plate voltage of the last IF amp).

My usual DVM didn't show any sort of resistance between windings. I eventually found something in the order of 2M leakage between the secondary and an internal rivet which passed through the plastic base of the IF can. The base contained the resonating capacitors for the primary and secondary. More cleaning/aerosol spraying/forced air drying followed.

While the situation improved to the point where only my HP 412 shows any resistance leakage, (and on the highest ohm range you can breathe on probes a quarter inch apart and see a change..a good chopper-equipped volt/ohmmeter is nice to have around..), I still have a positive voltage feeding through that upset the normal negative bias on the detector/agc/anl diodes.

Not having any easily used spare 455 khz transformers, I wimped out and isolated the secondary with .1 uf caps and installed an RFC to complete the dc loop for the detector diode. The detector now functions properly, but I seem to have problems with the AGC..swinging the AGC voltage from 0 to -11V (about max range with a strong broadcast sig) barely decreases the receiver gain at all. The tube plate/screen voltages are about normal in all cases, with the RF, mixer and IF chain. The IF section did mostly operate properly prior to circuit board removal and cleaning, although the agc didn't handle extremely strong signals well.

Something tells me I'm barking up the wrong tree here, so I'm passing this out for comment. Anybody have experience with this sort if transformer leakage or problems with the AGC not having any much even when the voltages seem ok? The circuit is one of the variants of the ever-popular triple diode detector/agc/anl circuits, with the detector and agc rectifiers used as shunt rather than series diodes. Ideas?

Thanks in advance! - Mark, NE9G

From boatanchors@theporch.com Mon May 1 07:34:48 1995
Date: Mon, 1 May 1995 02:34:48 -0500
Message-Id: <199505010727.CAA16540@zoom.bga.com>
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: Leakage in IF cans?

As Mark Shaum said

>
> While the situation improved to the point where only my HP 412 shows any
> resistance leakage, (and on the highest ohm range you can breathe on probes
> a quarter inch apart and see a change..a good chopper-equipped volt/ohmmeter
> is nice to have around..), I still have a positive voltage feeding through
> that upset the normal negative bias on the detector/agc/anl diodes.

Yeah, nothing like a 412 as a substitute megger. Handy for a bunch of other things as well. Newark carries the #12 bulbs for the chopper.

On the IF, if you haven't tried it, take the thing off and take it apart, and see if you can't clear the short. The coils should be separated from each other, and you should be able to clear or work around anything else that would create a leakage path. If the thing is Q-doped, a little lacquer thinner on a Q-tip will wash off the Q-dope. Watch out for the plastic base---check if it melts with lacquer thinner.

>
> Not having any easily used spare 455 khz transformers, I wimped out and isolated the secondary with .1 uf caps and installed an RFC to complete the dc loop for the detector diode. The detector now functions properly, but I seem to have problems with the AGC..swinging the AGC voltage from 0 to -11V (about max range with a strong broadcast sig) barely decreases the receiver gain at all. The tube plate/screen voltages are about normal in all cases, with the RF, mixer and IF chain. The IF section did mostly operate properly prior to circuit board removal and cleaning, although the agc didn't handle extremely strong signals well.
>
> Something tells me I'm barking up the wrong tree here, so I'm passing this out for comment. Anybody have experience with this sort if transformer leakage or problems with the AGC not having any much even when the voltages seem ok? The circuit is one of the variants of the ever-popular triple diode detector/agc/anl circuits, with the detector and agc rectifiers used as shunt rather than series diodes. Ideas?

Not clear to me which of the two most popular detector/AVC setups you are talking about here. I assume, since you speak of three diodes, that it is the separate type, a cap from the last IF plate thru 100-220 pf to a diode plate, cathode grounded, then thru an isolation circuit (meghohms) to the AVC bus. Anyway, use that 412 to make sure that the AVC voltage is showing up on the controlled tube grids. The time constant/filter cap on the other side of the filter often shorts out, grounding the AVC line and preventing AVC action. You should see essentially the same voltage on both sides of the isolation resistor. I assume nobody has substituted sharp cutoff pentodes for remote cutoff. Make sure that nobody has done something like shove a 6SG7 in a 6SK7 hole---6SG7 has twice the transconductance---but also is slower to cut off effectively (I have a 2-IF Magnavox console with these that develops about -20 volts of AVC on a 1000 microvolt signal). Check the cathode resistors in the controlled stages---if one has drifted down, it will slow down AVC action. You should also see the voltage across these resistors go down under heavy AVC action, as the tubes are cut off.

One other check---single diodes used for AVC and detector will go soggy. Jump across them with a 1N34 or a 1N914, If things change, you've got a tired vacuum tube diode.

--
****
Hank van Cleef vancleef@bga.com vancleef@tmn.com
****

From boatanchors@theporch.com Mon May 1 10:35:04 1995
Date: Mon, 1 May 1995 05:35:04 -0500
Message-Id: <199505011026.FAA09363@quake.xnet.com>
From: mshaum@xnet.com (Mark Shaum)
Subject: Re: Leakage in IF cans?

>On the IF, if you haven't tried it, take the thing off and take it
>apart, and see if you can't clear the short. The coils should be
>separated from each other, and you should be able to clear or work
>around anything else that would create a leakage path. If the thing is
>Q-doped, a little lacquer thinner on a Q-tip will wash off the Q-dope.
>Watch out for the plastic base---check if it melts with lacquer
>thinner.

I've had the cans apart. Whatever is leaking over is occuring within the plastic base, apparently. These cans (3/4 in sq type) have clear plastic snap-apart innards. The base, which apparently contains small capacitors using the base plastic as dielectric (small metal squares are visible through the clear material) is rivited together with one rivet in the center (provides the hole for reaching the bottom slug). They LOOK nice and clean. No excessive coil dope or anything obviously visible. Frustrating, but I'll figger it out eventually <g>.

>Not clear to me which of the two most popular detector/AVC setups you
>are talking about here. I assume, since you speak of three diodes,
>that it is the separate type, a cap from the last IF plate thru 100-220
>pf to a diode plate, cathode grounded, then thru an isolation circuit
>(meghohms) to the AVC bus.

Close.. the 'top' side of the transformer goes to the detector diode plate, with the cathode grounded. The AVC diode anode is coupled with a 25 pf cap to the detector diode anode, with the cathode returned to a 2.1 volt source for the agc delay. The resistors all hang off the 'bottom' side of the transformer winding. The dc return to ground is through the agc divider, which is two 220k's in series. Frustrating, as 440k to ground ought to be enough to bleed off a little leakage! The tube is a 6BC7, which shows good on a TV-7, and quickie substitutions of silicon diodes didn't make a diff..

One of the things I wanted to try (once I get it working) is to move the agc pickup point to the plate of the last IF, as you described above, and move the BFO injection from the input to the last IF to the detector (where I'd prefer it!). This will eventually go to some sort of no-holes 40673 type product detector which can be removed if the set is later sold or traded.

 Anyway, use that 412 to make sure that the
>AVC voltage is showing up on the controlled tube grids. The time

>constant/filter cap on the other side of the filter often shorts out,
>grounding the AVC line and preventing AVC action. You should see
>essentially the same voltage on both sides of the isolation resistor.

>to cut off effectively (I have a 2-IF Magnavox console with these that
>develops about -20 volts of AVC on a 1000 microvolt signal). Check the
>cathode resistors in the controlled stages---if one has drifted down,
>it will slow down AVC action. You should also see the voltage across
>these resistors go down under heavy AVC action, as the tubes are cut
>off.

Good point about checking the cathode voltage as I apply AGC. I'll rig up a bench supply and determine what is required to control the gain of each stage.

This is getting to be a chore, but an enjoyable task nevertheless.. just so the R-100A doesn't turn into a bottomless pit of goofy little problems like my Ranger did for six months.. my only gripe is the circuit board construction. Having to go topside to see the components while viewing and probing on the bottom side is a pain! I'm beginning to wonder if the dunk/cleaning of the circuit board (cheap XXXP phenolic) hasn't caused the board material to absorb some moisture. Mebbe the problems will go away by the time I return to this thing..

73 and thanks for the tips! - Mark, NE9G

From boatanchors@theporch.com Mon May 1 00:40:52 1995
Date: Sun, 30 Apr 1995 19:40:52 -0500
Message-Id: <Pine.SUN.3.91.950430101452.27125A-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: Military equipment manuals (problems finding)

While it's on my mind (and I have a short attention span):

It's tough enough finding a manual for old military gear when the manufacturer's name is on the nameplate and the manufacturer is still doing business under that name (hasn't been gobbled up by a bigger fish). What do you do when the name has been replaced by some weird code?

During WW2, the Navy used the Manufacturers Designator Code to identify the maker of a particular piece of equipment. They started with two-letter codes, went to three letters prior to WW2, and into the 4-letter codes before the end of the war. All of these codes for commercial companies began with the letter "C". For example: RCA was "CRV", Collins was "COL", Westinghouse was "CAY", Hewlett-Packard was

"CAQI", etc. This was later called the "Khaki" code (probably after an attempt to pronounce the code for Hewlett-Packard (?), according to my wife (who issued tech manual identification numbers for the Navy). I've seen these codes on Signal Corps nameplates also, so don't get the idea that the Navy was the only organization using them! One other minor point: the Government also had a few codes with either "R", "G", or "C" as the first letter. These were the Signal Corps laboratories, Naval Research Lab, etc.

The Khaki Code was eventually replaced by the Federal Supply Code of Manufacturers (FSCM - pronounced "fiskum"), which was a five-character alphanumeric code. The FSCM was fairly recently (within the last ten years?) renamed as the Contractor and Government Entity (CAGE - at least that one is pronounceable!), and is currently in use. There did not appear to be any change in content, just the name. Unfortunately, the CAGE is currently published as an inch-thick stack of microfiche sheets. It would probably cost an arm and a leg to obtain, AFTER you file a Freedom of Information Act request. My wife informs me that the CAGE may be out in CD-ROM by now, as with many other documents.

Good luck tracking down manufacturers. One trick that some large companies used when they didn't want to be hassled about gear years afterward was to create a subsidiary, get a FSCM or CAGE assigned, get contracts & furnish the products, then kill off the subsidiary! Result: you CAN'T get there from here. No way to get a manual from a now nonexistent company.

From boatanchors@theporch.com Mon May 1 21:44:43 1995
Date: Mon, 1 May 1995 16:44:43 -0500
Message-Id: <950501173650_102996358@aol.com>
From: KD0HG@aol.com
Subject: re:Movie Review

If I was going to watch a remake, I'd MUCH rather see Sharon Stone than Harrison Ford....perhaps cast as the daughter of the local FCC field engineer that busts the unlicensed operation....or maybe as a VE for the local han club....uuuh, lighthouse sweeper? <kd0hg>

From boatanchors@theporch.com Mon May 1 17:06:01 1995
Date: Mon, 1 May 1995 12:06:01 -0500
Message-Id: <799347461.2836307@AppleLink.Apple.COM>
From: FRANCIS4@applelink.apple.com (Francis, Dexter)

Subject: Movie Review-No flames please!

I hope this topic isn't considered too far out of line for the group, but it's so rare that I've stumbled across a movie about amateur radio that I thought I'd risk it. The film is called "High Frequency" and was actually somewhat entertaining despite it's obvious flaws. The copyright date was 1988, and it was done by an Italian production company, so it's no worse than any American TV of that era. The plot line is fairly simple; 12 year old American kid (Danny) who's dad is missing after a shipping accident, spends his spare time roaming the airwaves with a TR-4, mostly rag chewing with marine operators and hoping to find some evidence that his dad is still alive. He's using a 2x3 call sign (WM1ATE) doing phone on 40 and 80 and operates out of a lighthouse on an island off the coast of New England. (His operating practices are in line with the fact that he's really NOT licensed after all, but whadda you expect?) One day he QSOs with a satellite tech working at a downlink station in the Italian Alps and starts up a friendship. Shortly thereafter the tech (Peter) picks up a mysterious TV feed from somewhere and witnesses a murder. At first he thinks it's just some stray feed of a movie, but when the picture stays the same for over 20 minutes her figures it's not memorex. What follows is a mildy entertaining chain of events as Pete and Danny try to figure out who's involved and where. The rigs are Danny's TR-4/SP-4, an FRG-7 which is used as a spot for an IC something to sit on (sorry, no BA's in sight!) and about 20 million dollars worth of commerial sat gear. There were some hitchcock like moments towards the end. It was almost worth the $2 rental fee. After all it was about radio. If it could be re-scripted by Tom Clancy and cast with Harrison Ford as the sat-tech it would probably survive Siskel and Ebert.

-df

From boatanchors@theporch.com Mon May 1 18:31:52 1995
Date: Mon, 1 May 1995 13:31:52 -0500
Message-Id: <199505011822.LAA21802@igc3.igc.apc.org>
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Re: Movie Review-No flames please!

> Subject: Movie Review-No flames please!

No flame from me. Thanks for the tip-off.

There's another movie I've been looking for for years that features BAs in dominant roles and is even technically accurate. The title is "The House On 39th Street" or something very similar. It tells the supposedly true story of Nazi spies in New York during WWII. As part of the plot, a double agent poses as a new spy sent from Germany and builds a station they use to send their information. There's even a shot of the US "crusing room" filled with receivers which monitors the transmissions of the spys. When the good guy is discovered as a double agent the Nazi spy master takes over the key and the guys in the crusing room say "That's not Joe's fist." Totally cool. If anyone knows where a copy of this movie can be found, please let me know.

Regards,

Dick Dillman

From boatanchors@theporch.com Mon May 1 00:07:25 1995
Date: Sun, 30 Apr 1995 19:07:25 -0500
Message-Id: <Chameleon.4.01.2.950429232144.jproc@>
From: jproc@worldlinx.com
Subject: RE: Nomenclature systems

You said:

>If we ever get around to putting together an FAQ file or INFO file for this
>list, one thing that can go in there is a bunch about nomenclature systems.

Jim,

Some of this information already exists in the MILLIST file maintained by Larry O'Laughlin, so it might be a slight duplication of effort. Why don't we as a group, thrown in our tidbits to the MILLIST and get it beefed up?. I've just sent a sizeable contribution to the list myself.

The rest of your message about nomenclature was great. Now I know what SCR means. You have just planted seed, keep it growing.

Regards,

Jerry Proc   VE3FAB
E-mail: jproc@worldlinx.com
Radio Restoration Volunteer
HMCS Haida Toronto, Ontario

From boatanchors@theporch.com Mon May 1 03:27:15 1995
Date: Sun, 30 Apr 1995 22:27:15 -0500
Message-Id: <Pine.SUN.3.91.950430200144.9399C-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: Nomenclature systems

If you'll hang in there, your questions will be answered. I've had an article in to ER for about two years now that defines all three major nomenclature systems used during WW2 (with the exception of the Navy Mark/Mod system which was used in weapon systems). It runs 13 pages, and Barry is quite understandably reluctant to publish it in one shot; he'd like to break it up into installments. Walt Hutchens provided the peer review, and concurs with Barry. I haven't had the time to rework it into three sections, and am about ready to concede that any way he wants to work it out is fine with me. (13 pages would, with the normal classified in each issue, occupy half an entire issue! No wonder he'd like to break it up. I don't blame him a bit.)

The article contains detailed tables listing both the prefixes and their meanings for all part designators in all three systems. That level of detail is of absolutely no interest to the average (non-military-oriented) BA'er. It is of intense interest to collectors of military gear. Someone (usually the publisher) has to make a tough decision. Glad it's not me.

Ray Mote, W6RIC (805) 985-6048

From boatanchors@theporch.com Mon May 1 14:47:31 1995
Date: Mon, 1 May 1995 09:47:31 -0500
Message-Id: <m0s5wKC-00001gC@next3.acme.ist.ucf.edu>
From: clarke@acme.ist.ucf.edu (Thomas Clarke)
Subject: Old Crystals from r.r.s

Saw this on r.r.s
reply to dpride@swcp.com (David Pridemore)

I have the following crystals for sale. A lot of these would be used in

equipment prior to the 1950's.

Texas Crystals

```
                3885 kc
                7180 kc
                7180 kc (two of them!)
                7250 kc

                7210 kc

        Master Crystal Labs
                7245 kc

        Scientific Radio Products
                5305 kc
                7410 kc
                5760 kc

        Bliley Electric Co.
                7340.7 kc
                7367.7 kc

        Bliley (These are round and about 2" in diameter)
                3792.5 kc
                7062   kc
                (These are round and about 1 1/2" in diameter)
                Unknown
                (These are round and about 1" in diameter)
                1968 kc
                7096 kc
                Unknown
                7160 kc

        And for the real adventerous - one that is square - approx 1
1/2"

x 1 1/2", black, two post, unknown freq or manufacturer.

Best offer or trade

                        73

                        David de NORAF



From boatanchors@theporch.com  Tue May  2 03:37:08 1995
Date: Mon, 1 May 1995 22:37:08 -0500
Message-Id: <m0s683b-000HvlC@beacons.cts.com>
From: kevin@beacons.cts.com (Kevin Sanders)
Subject: PL-175A vs. 4-400A comparison?
```

Hi gang,

I recently acquired from a member of this list a Johnson Invader 2000. The manual states a pair of PL-175A tubes are used in the amplifier but they have been replaced by a pair of 4-400s. In perusing my 1964 ARRL handbook I see the specs are very similar, with the following differences (maximum ratings are left out--they are either the same or 4-400 is higher):

	PL175A	4-400A
Input capacitance	15.1 pf	12.5 pf
Output capacitance	9.8 pf	4.7 pf
Grid-plate capacitance	0.06 pf	0.12 pf
Screen voltage	600V	300V
Grid voltage	-200V	-170V
Plate current	350ma	270ma
Screen current	29ma	22.5ma
Grid current	6ma	10ma
Grid drive	1.4W	10W

I must assume that the rig was modified to use these tubes, particularly the screen voltage. What else should I be aware of when checking out this rig? It also looks like a resistor must have been changed in the grid circuit, but I really don't understand how such a large difference in grid drive can result given the grid current ratings and the relatively small difference in grid voltage. Wouldn't using a much-reduced drive level in the 4-400s affect the linearity of the tubes?
BTW I'm also assuming non-grounded-grid operation since the handbook does not give the specs for this on the PL175A and since the schematic indicates otherwise.

Thanks for any help...

```
73,                               _______________
                                 | 0  ___ ___ .. |
    Kevin Sanders, KN6FQ (SDG)   | o, \_/ \_/ .o |      Try Boatanchors
    kevin@beacons.cts.com        | o,, @ o @ ,,o |      For A Real Lift
                                 |_______________|
```

From boatanchors@theporch.com Mon May 1 04:41:21 1995
Date: Sun, 30 Apr 1995 23:41:21 -0500
Message-Id: <01HPYWV9DU8I93DYGI@delphi.com>
From: BOBFABRIS@delphi.com
Subject: QST FS

I have three years of ancient QSTs here needing a good home. They are
1934; 1959; and 1966. Cost is 415. per year plus post. Thanks, Bob

From boatanchors@theporch.com Mon May 1 07:01:24 1995
Date: Mon, 1 May 1995 02:01:24 -0500
Message-Id: <Pine.3.89.9504302359.A8846-0100000@netcom20>
From: "Hal R. Waite" <halwaite@netcom.com>
Subject: Re: QST FS

On Sun, 30 Apr 1995 BOBFABRIS@delphi.com wrote:

> I have three years of ancient QSTs here needing a good home. They are
> 1934; 1959; and 1966. Cost is 415. per year plus post. Thanks, Bob
>

Four hundred and fifteen WHAT? Certainly not dollars.

From boatanchors@theporch.com Mon May 1 19:51:01 1995
Date: Mon, 1 May 1995 14:51:01 -0500
Message-Id: <199505011937.MAA21588@ix2.ix.netcom.com>
From: w0ogh@ix.netcom.com (Larry Godek)
Subject: RAX rec.

This weekend at a local swapmeet I found this pretty nice looking RAX.
It had not only the tube puller inside, but the dynamotor on the back
of it still safetied in place.

Now. I have a schematic of it in an old surplus conversion manual but
I am looking for two things.
1st. A manual for it. (wish for the moon) and
2nd. A rack mount. (again wish for the moon)

However, if anyone of you fine folk out there happen to have either of
these two items laying around not being used, har har, I would
certainly like to hear from you.

Thanks for allowing the Q & E session.

Larry W0OGH
W0OGH@ix.netcom.com

From boatanchors@theporch.com Mon May 1 21:07:28 1995
Date: Mon, 1 May 1995 16:07:28 -0500
Message-Id: <199505012059.NAA00504@hobbes.UCSC.EDU>
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Re: RE>4-65 and 4PR65 power tub

Not the ARC-65; it uses 4CX250-Fs or something like that as I recall.

From boatanchors@theporch.com Tue May 2 00:36:11 1995
Date: Mon, 1 May 1995 19:36:11 -0500
Message-Id: <950501202646_103223133@aol.com>
From: WaltN@aol.com
Subject: Re: Replacing rectifiers w/di...

>>Hello all....I have heard that it is bad medicine to replace a vacuum
>>rectifier such as a 5U4 with silicon diodes.

>The short answer is that a VR comes up slow and soft while Si comes up
>RIGHT NOW. Since filaments exhibit minimum resistance when cold, this
>results in a current surge through the filament string that may result
>in excess current as they come up.

Not only do solid-state diodes come up faster as Padgett says, they do not have the voltage drop you'll see across the hollow-state variety. If you replace the HS rectifier(s) with a SS equivalent, also be sure to add a dropping resistor to bring the B+ back down to the level specified in the schematic.

From boatanchors@theporch.com Mon May 1 20:15:20 1995
Date: Mon, 1 May 1995 15:15:20 -0500
Message-Id: <01HPZRGL2D1EEMXYFC@tntech.edu>
From: cfm5723@tntech.edu (Conard Murray)
Subject: Replacing rectifiers w/diodes query

Hello all....I have heard that it is bad medicine to replace a vacuum rectifier such as a 5U4 with silicon diodes. The only reason I would want to do this is to reduce the drain on the power transformer.

Somehow this is supposed to reduce the tube life of the other tubes in the set. Does anyone out there have any explanation why this would happen?

Thanks... de Conard WS4S

Conard F.Murray, WS4S, NNN0UTN 615-372-3718
R&D Engineer, Electrical Engineering Dept. cfm5723@tntech.edu
Tennessee Tech University, Cookeville, TN 38505

My other rig is a BA too...

From boatanchors@theporch.com Mon May 1 20:49:20 1995
Date: Mon, 1 May 1995 15:49:20 -0500
Message-Id: <9505012022.AA05384@uvs1.orl.mmc.com>
From: padgett@tccslr.dnet.mmc.com (A. Padgett Peterson, P.E. Information Security)
Subject: RE: Replacing rectifiers w/diodes query

>Hello all....I have heard that it is bad medicine to replace a vacuum
>rectifier such as a 5U4 with silicon diodes.

The short answer is that a VR comes up slow and soft while Si comes up RIGHT NOW. Since filaments exhibit minimum resistance when cold, this results in a current surge through the filament string that may result in excess current as they come up.

OTOH Zenith went to Se & no transformer (does have a ballast resistor) in the T/O in 1949 and you would expect the 1.4v filaments to be rather delicate.

Warmly,
Padgett

From boatanchors@theporch.com Mon May 1 21:29:29 1995
Date: Mon, 1 May 1995 16:29:29 -0500
Message-Id: <Pine.SUN.3.91.950501141713.18840B-100000@crl12.crl.com>
From: Steven Wilson <randyw@crl.com>
Subject: Re: Replacing rectifiers w/diodes query

I have done it with no problems. I have noticed an increase in the B+ voltage and of course gets rid of a lot of heat.
de stan ak0b

From boatanchors@theporch.com Mon May 1 21:53:53 1995
Date: Mon, 1 May 1995 16:53:53 -0500

Message-Id: <199505012140.RAA14549@shiva.shiva.com>
From: John Shriver <jas@shiva.com>
Subject: Re: Replacing rectifiers w/diodes query

Replacing a fast-starting rectifier like a 5U4 with silicon diodes isn't too bad. The increase in B+ may be a problem if the filter caps are not rated conservatively, or you exceed tube plate voltage ratings. A dropping resistor can help that, adds heat, but makes the regulation no worse than the original plate resistance of the 5U4.

On the other hand, replacing a controlled warmup-rectifier like the 5V4 or 5AR4 with silicon diodes is bypassing the original intent of the equipment designer. Those tubes are designed to warm up more slowly than the 11 second warmup of a normal receiving tube. Tubes with high cathode emissions (power tubes, some smaller ones) suffer reduced life when plate voltage is applied when the cathode is still cold. It causes "cathode stripping", the loss of the elements in the cathode which provide or accelerate the electron emission.

It's frustrating, we want to preserve the tube life of the small signal tubes, but the tubes that wear out the fastest, and are getting rare fast, are the rectifier tubes.

From boatanchors@theporch.com Mon May 1 22:09:41 1995
Date: Mon, 1 May 1995 17:09:41 -0500
Message-Id: <199505012149.QAA13770@zoom.bga.com>
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: Replacing rectifiers w/diodes query

As Conard Murray said

> Hello all....I have heard that it is bad medicine to replace a vacuum
> rectifier such as a 5U4 with silicon diodes. The only reason I would want to
> do this is to reduce the drain on the power transformer.
>
> Somehow this is supposed to reduce the tube life of the other tubes in the
> set. Does anyone out there have any explanation why this would happen?

The significant thing to consider is that the dynamic plate resistance of a 5U4 is around 100 ohms (of an 80/5Y3, closer to 200). Most power supply designs assume a 30-50 volt drop across the rectifier when setting the B+ distribution. You will want to put some ohms in each diode leg.

The other issue is warmup time. With a filament vacuum rectifier, this is around 3 seconds, meaning that you have voltage with no loading other than bleeder networks and VR tubes until the rest of the tubes heat up at around 10-11 seconds and draw current. With diodes, you get full B+ within milliseconds of turnon.

In terms of "drain on the power transformer," the 5U4 filament represents 15 watts. The filament winding is usually heavy wire that does not contribute substantially to I-squared R losses in the transformer---only significant as they are reflected back to the primary. The really abusive heating that a transformer gets is when using a capacitive input filter---the conduction peaks are only part of the cycle, and add 12-20% "rule of thumb" heating (depending on what old text you read). Choke input filters heat the transformer far less.

--
****
Hank van Cleef vancleef@bga.com vancleef@tmn.com
****

From boatanchors@theporch.com Mon May 1 22:54:21 1995
Date: Mon, 1 May 1995 17:54:21 -0500
Message-Id: <9505012232.AA05081@texan.frco.com>
From: bill@texan.frco.com (William Hawkins)
Subject: Re: Replacing rectifiers w/diodes query

If you do replace a 5 volt rectifier, go one step further and put the unused winding in series with the primary (aiding, not bucking). That way, you have a 5 volt winding in series with a 117 volt winding for a line voltage of 122 - closer to what the electric company provides today.

Speaking of today's high line voltage, do the power companies do that to sell more power, or is there a better reason? Perhaps air conditioner motors draw less current at the higher voltage, putting less of a strain on existing outside plant.

Bill Hawkins bill@bvc.frco.com 612 895 2085

From boatanchors@theporch.com Mon May 1 23:29:04 1995
Date: Mon, 1 May 1995 18:29:04 -0500
Message-Id: <9505012259.AA06114@uvs1.orl.mmc.com>
From: padgett@tccslr.dnet.mmc.com (A. Padgett Peterson, P.E. Information Security)
Subject: Re: Replacing rectifiers w/diodes query

>Speaking of today's high line voltage, do the power companies do that
>to sell more power, or is there a better reason? Perhaps air conditioner
>motors draw less current at the higher voltage, putting less of a strain
>on existing outside plant.

Well, below a certain voltage, the rotors start lagging and the motor heats up (used to know why and have it here...somewhere...).

However suspect it is more to make sure that all of those a/cs down here in 60 amp-service-homes get "enough" and spend minimum time at startup/inrush.

P.fla

From boatanchors@theporch.com Mon May 1 22:39:32 1995
Date: Mon, 1 May 1995 17:39:32 -0500
Message-Id: <9504017993.AA799366138@mail.creo.bc.ca>
From: lhalliday@creo.bc.ca
Subject: Re[2]: Movie Review-No flames please!

Dick writes:

> There's another movie I've been looking for for years that features
> BAs in dominant roles and is even technically accurate. The title is
> "The House On 39th Street" or something very similar. It tells the
> supposedly true story of Nazi spies in New York during WWII...

One of the Canadian cable channels are currently showing Wish Me Luck, a dramatic series about English women recruited to help out in occupied France, circa 1943. Unlike High Frequency et al, there are lots of boatanchors, ranging from the big radios back home (no identification - sorry), to the portable clandestine sets that either are the real thing, or are awfully good copies. The CW is real (coded groups, 15-20 WPM, with the pink noise sound of narrow filters), and the way the actors send looks and sounds like they really know what they're doing. Technical accuracy, of course, right down to one of the radio operators, Aimee using her hotel bed as a counterpoise for the antenna she's just thrown up on the roof.

When Aimee gets caught, the Germans have one of their own impersonate her. The British detect this by her subtly altered fist (field and base operators train together), and rather than let on that they know what's up, decide to feed "Aimee" disinformation. First time I've ever shouted obscenities at a tv programme... :-)

73 from Burnaby,
laura VE7LDH who really is still around, and who will be leaving the list temporarily, but will be back in June

---

From boatanchors@theporch.com Mon May 1 23:14:28 1995
Date: Mon, 1 May 1995 18:14:28 -0500
Message-Id: <9505012255.AA06093@uvs1.orl.mmc.com>
From: padgett@tccslr.dnet.mmc.com (A. Padgett Peterson, P.E. Information Security)
Subject: RE: Re[2]: Movie Review-No flames please!

Think that is "The House on 92nd St." 1945 Dir Henry Hathaway. - P.fla

---

From boatanchors@theporch.com Tue May 2 01:50:33 1995
Date: Mon, 1 May 1995 20:50:33 -0500
Message-Id: <2FA577EF@sharkgate.sandiegoca.attgis.com>
From: "Kenan, Larry" <llk@sandshark.sandiegoca.attgis.com>
Subject: RE: Re[2]: Movie Review-No flames please!

Laura Halliday VE7LDH writes:
>>Dick writes:
>> There's another movie I've been looking for for years that features
>> BAs in dominant roles and is even technically accurate. The title is
>> "The House On 39th Street" or something very similar. It tells the
>> supposedly true story of Nazi spies in New York during WWII...
>
>One of the Canadian cable channels are currently showing Wish Me Luck,
>a dramatic series about English women recruited to help out in
>occupied France, circa 1943. Unlike High Frequency et al, there are
>lots of boatanchors, ranging from the big radios back home (no
>identification - sorry), to the portable clandestine sets that either
>are the real thing, or are awfully good copies. The CW is real (coded
>groups, 15-20 WPM, with the pink noise sound of narrow filters), and
>the way the actors send looks and sounds like they really know what
>they're doing. Technical accuracy, of course, right down to one of the
>radio operators, Aimee using her hotel bed as a counterpoise for the
>antenna she's just thrown up on the roof.
...

A friend of mine was in the Dutch underground during WWII and he relates some of the details as he experienced them:

The need for setting up the transmitter quickly, getting the message off, deinstalling the transmitter and getting away before the Germans could locate the transmitter were paramount. The whole operation had to take less than five minutes.

Transmitting locations would be away from places that would be critical if the Germans identified the location. Antennas were prepared in advance when possible by making sure that a length of gutter on a building or a section of fence wire was a good length and not grounded. The messages were sent to England, the operator would bring a small battery operated transmitter on a bicycle, hook it to the antenna and a ground and send a short encrypted message, then get away fast. There was a shortage of trained Morse code experience so typically the operator was only capable of about 5 wpm. The messages were broken into cipher groups of fixed length and did not usually exceed 1 minute of transmitting time. This required that much of the messages be references to a preplanned list.

Batteries were especially hard to come by, sometimes couriers would arrive from England with supplies but if that failed there were some young women in the underground that could trade the Germans soldiers some sex for batteries.

I've found my friend's recollections fascinating, and there is a lot more to his story. I wish he would write a book.

Larry Kenan

From boatanchors@theporch.com Mon May 1 14:19:25 1995
Date: Mon, 1 May 1995 09:19:25 -0500
Message-Id: <Chameleon.4.00.4.950501090535.grant@NQ5T.gtetel.com>
From: gyoungma@gtetel.com
Subject: Russian Tubes - Reprise

I posted a question a couple of weeks or so about about Russian tubes, specifically 811A's for use in Class B
modulator service (Globe King 500). I ended up buying a pair of matched Svetlana 811A's from RF Parts.

The result? THEY DON'T WORK. Low Gm (under 1000), low power output, very low
maximum modulation percentage,
severe clipping. The one good RCA 811A I had, put in the positive modulation side
of the pair, cleans things
up partly. But for whatever reason, the Svetlana tubes arent' worth a crop, at
least in this service, with
these specific two tubes.

Grant/NQ5T

From boatanchors@theporch.com Mon May 1 15:47:31 1995
Date: Mon, 1 May 1995 10:47:31 -0500
Message-Id: <Chameleon.4.00.4.950501103910.grant@NQ5T.gtetel.com>
From: gyoungma@gtetel.com
Subject: Re: Russian Tubes - Reprise

> for whatever reason, the Svetlana tubes arent' worth a crop, at least in
>this service, with
>>these specific two tubes.
>
>Grant,
>
>Have you talked to the Setlana folks about this? We would all be interested
>in hearing what they say ... especially after they know we're going to hear
>what they say!
>
>
>--
>Roy --
>
>Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
>(National Institute of Standards and Technology, formerly NBS)
>301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov
>---
>
>

I have already talked to RF Parts and gotten an RMA number to return the tubes.
Never had this problem with
them before, so don't know what to expect from them (hassle, no hassle, etc.).

I called Svetlana this morning, and both of their engineers are in Dallas at a
show. I expect to hear from
one of them later today --

It will be interesting to hear what they have to say. With the Svetlana tubes in the Globe King, the PEP output runs about 500 watts with gross positive and negative peak clipping. With the "better" of the Svetlanas in the negative side and a used RCA 811A in the positive side, the PEP output runs about 900-1000 watts with MUCH better sounding audio, but still not perfect. The difference is quite remarkable, though. In fact, for the first few seconds after lighting the filaments, the thing sounds superb. The Svetlana tube seems to lose it after the fils have been on a while, and the audio output takes on a muffled and distorted quality. It shows up on the scope, too -- heavy negative peak clipping.

Grant/NQ5T

From boatanchors@theporch.com Mon May 1 16:40:52 1995
Date: Mon, 1 May 1995 11:40:52 -0500
Message-Id: <m0s5y7p-00001gC@next3.acme.ist.ucf.edu>
From: clarke@acme.ist.ucf.edu (Thomas Clarke)
Subject: Re: Russian Tubes - Reprise

Grant/NQ5T writes:

>for the first few seconds after lighting the filaments, the thing
>sounds superb. The Svetlana tube

>seems to lose it after the fils have been on a while

Sounds like low filament voltage. Could they be designed for

6.6 volts? To whence are Russian voltmeters traced?
Certainly not the NBS (now NIST).

Tom Clarke
KE4VFH

From boatanchors@theporch.com Mon May 1 19:44:30 1995
Date: Mon, 1 May 1995 14:44:30 -0500
Message-Id: <9505011053.0FB0200@24stex.com>
From: michael.moore@24stex.com
Subject: Sacramento Gathering

A Ham swap was planned for 4/30 in Sacramento but was cancelled at the last minute due to rain. Some of us, however, didn't hear about the cancellation so went anyway. Some of the goodies being sold were:

R-390...$150..   fair
Hallicrafters S-20R...$45.00.........fair, working.
Lots of heath stuff including a vtvm for $3.00 (got it).
a dozen or so TV7/D tube checkers $35.00 each. (got one..he may still have some available).

Those who aren't going to Foothill next weekend will be back to the rescheduled event on 5/7.
NOTE: Annual swap event for North Hills Radio club will be on 5/21 at Carmichael Elks lodge. Usually some goodies here.

Questions: The booklet with the TV7 was dated April 1962. So was the addendum. What is the latest date. Also there are no plate or grid cap connectors. Just pin jacks. Did this unit originally have a set included?? Should be easy to make a pair if I can find connectors <G>.

Mike K6SQJ

PS: How was Dayton?

From boatanchors@theporch.com Mon May 1 23:55:35 1995
Date: Mon, 1 May 1995 18:55:35 -0500
Message-Id: <9505011426.0KA3E00@24stex.com>
From: michael.moore@24stex.com
Subject: SACTO

RI>Item Subject: Sacramento Gathering

RI>> A Ham swap was planned for 4/30 in Sacramento but was cancelled at the

RI>I was there. Were you selling or just buying? Bought a National 173
RI>receiver, Heath HV bench supply, and an original HP audio oscillator.

I saw that rcvr and looked at it several times but my wallet said run.

RI>Foothill is the second Saturday of the month. That puts it the 13th,
RI>which is the weekend after next. Sunday the 7th is the swap at

RI>Livermore, which is always on the first Sunday of the month.   That's

Still suffering from rain on the brain. Meant Livermore. Oh well.

From boatanchors@theporch.com Mon May 1 18:23:12 1995
Date: Mon, 1 May 1995 13:23:12 -0500
Message-Id: <Pine.LNX.3.91.950501121429.3093A-100000@thelair.zynet.com>
From: johnb@thelair.zynet.com
Subject: So who's going to post the Dayton trip rpt?

Go ahead! rub it in! Tell us what we missed?!

:-)
/john

John M. Brewer   wb5oau
johnb@thelair.zynet.com

From boatanchors@theporch.com Tue May 2 03:47:03 1995
Date: Mon, 1 May 1995 22:47:03 -0500
Message-Id: <9505012046.aa24880@jackatak.theporch.com>
From: Fire Bottle archive handler <firebotl@jackatak.theporch.com>
Subject: So who's going to post the Dayton trip rpt?

John M. Brewer wb5oau   says:
>   Go ahead! rub it in! Tell us what we missed?!

Gee, John. Ya'd almost think Albuquerque was a long ways away! ;^)

For openers, and *I* missed that, Friday was an unbelieveably nice day weatherwise, with LOADS of trading from the opening gun (which musta fired sometime Thursday afternnon from reports I heard! ;^)

For a reprise, the weather was also really nice Saturday. Loads of sightings, far too numerous to mention in a short post. Evidently, the sun got to everyone's brain, because the flea began to clear out pretty early when the weather for Sunday was *predicted* to include showers... it sprinkled for a few seconds real early in the morning, but other than the overcast, it was another good day... sort of a preview of the weather they hope to have for May 1996.

MOST important sightings were:
Barry Wiseman at the Electric Radio Booth inside. Had a wonderful chat.
And, Chuck Adams, K5FO, a former list subscriber and current QRP list heavy hitter, who is going to the ARRL National at Peoria in 1996 to attempt a new world record for CW copy. Sandy, my ever-patient and understanding bride, really enjoyed meeting the big guy, and after chatting for a goodly while and having a Pepsi together, as Chuck went back out to the flea, and Sandy and I wandered around the exhibit halls, she said: "At long last. A Ham I like!" (She likes you, too, Larry, but after some of my RF buddies, The Speedster was a welcome change. (Good to seeya Chuck. List traffic is up, but come back if you can spare the time to read... we can even send you a daily digest! ;^)

So, by not going you missed good weather in Dayton, countless great deals never to happen again, a chance to enjoy a mob scene at Casa Lupita on Friday night, and a chance to see 35,000+ fellow RF nuts all in one place! I missed ya!
--
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^)
- - - BoatAnchor Mailing List Archiver/Owner - - -
firebotl@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"

From boatanchors@theporch.com Tue May 2 01:00:02 1995
Date: Mon, 1 May 1995 20:00:02 -0500
Message-Id: <950501204727_103251123@aol.com>
From: KD0HG@aol.com
Subject: Re: Solid Stating Collins P.S.

There's going to be plenty of opinions on this one! Mine? I plain don't like the idea- pulled the silicon out of my S-Line some time ago.
Q. Dosen't the supply run cooler?
A. Yes, by eliminating the 30 volt or so drops in the 5U4 & 5R4. But, the rig and internal components run hotter a corresponding amount. I'd rather have the heat in the power supply, myself.
Q. Don't you get more TX output?
A. Yep. Measured about 6% more output from a 32S-1. Is that .1 DB or something?
Q. What about the rig's tubes?
A. It's was proven in the 1950s during research conducted by ARINC that repeated application of B+ before a tube is heated causes premature loss of emission and early tube failure (cathode stripping)
Q. But this mod was recommended and approved by Collins!
A. And years after the original designers of the S-Line moved on.

Q. But 5U4s are getting scarce and hard to find.
A. And so are drugstore tube testers. 5U4s and 5R4s can be found by looking no further than the Fair Radio catalog. (5U4GB @ $3.95, used, checked; 5R4 @ $4.25 new, $2.00 used). Soviet rectifiers are also hitting the market. It's much, much harder to find some replacement semiconductors for 60s audio gear and BAs than tubes used in postwar Collins gear.
If one absolutely insists on using silicon rectifiers, the idea presented here of using the abandoned 5 volt heater winding(s) of the transformer in series with the primary to 'buck' the input voltage was very good. Finally, as a point of interest, I asked an engineer at the power company where I work why the line voltage tended to run 122+ around here. I was pressed for time so couldn't ask many questions, but he mentioned someting about making it easiser to deal with reactive customer loads with poor power factors. (Probable translation- we sell more power that way, stupid!) The Colorado state utility commission allows 120 volts, + or - 5%, so I suppose I'm lucky not to have to deal with 126 volts.   73 <bill>

From boatanchors@theporch.com Sun Apr 30 22:53:03 1995
Date: Sun, 30 Apr 1995 17:53:03 -0500
Message-Id: <Pine.3.89.9504290926.A20915-0100000@ozarks>
From: "C. Frank Gilmore" <fgilmore@ozarks.sgcl.lib.mo.us>
Subject: Re: SSB history (Was: Re: Swan ssb transceiver)

Well we must not forget the absolutely worse thing Eico ever put out, the 753 transceiver. I sold three of the &^*(things and spent weeks trying to make them work after the owners built them. Even at best they were terrible. The Eico rep finally got a factory authorization for me to refund money to all three of the customers and ship the things back to the factory. He said it might mean the end of Eico....he wasn't far wrong.

73,
Frank
de K0JPJ ex-W5PVX ...-.-

From boatanchors@theporch.com Mon May 1 22:29:50 1995
Date: Mon, 1 May 1995 17:29:50 -0500
Message-Id: <n1412774221.73595@msmailgw1.arlut.utexas.edu>
From: "rohre" <rohre@arlut.utexas.edu>
Subject: Substituting silicon rectifiers for others

The replacing of the 5U4 with a suitable solid state replacement was very common

back in the 60's. The more efficient silicon did increase the voltage and that had to be countered with a series voltage dropping resistor which would also limit the current available, or else one needed to retap a primary of the power transformer, if it had a multi tap for various AC voltages. This was to keep the rectified DC within safe ratings of the filter capacitors. I guess you could actually put several diodes in series, or even a power zener to limit the voltage increase. At low currents, I have heard of using reactance of high voltage tubular capacitors to drop AC voltage to a device. Some radios already had separate on switches for filaments and high voltage and such could be added if you feared for the inrush on cold filaments of the other tubes. Various devices that are basically current inrush limiting have been used in TV sets in past years, and are probably easy to add to a radio. The replacement of the need for the 5 volt rectifier drawing current from the power transformer, and adding to the heat load, is somewhat countered by the possible change in regulation of all the voltages by such a heavy current draw as the rectifier filament was, being off loaded from that transformer. A high quality transformer might not allow the other voltages to go up, but a lesser transformer might not benefit from this substitution. What does the group think? Don't we have some more ex TV shop folks aboard? I saw it done in shops, but never enough to keep figures on the results long term. I never got around to it in my own boat anchors.
--73, Stuart

From boatanchors@theporch.com Tue May 2 00:27:27 1995
Date: Mon, 1 May 1995 19:27:27 -0500
Message-Id: <Pine.3.89.9205011949.B24344-0100000@mm1001.theporch.com>
From: Kevin J Pease <kevin@mm1001.theporch.com>
Subject: Re: Substituting silicon rectifiers for others

The resistor not only reduces the B+ but aslso limits the inrush current to the filter capacitors. I strongly recomend 50-100 ohms in series for that purpose.

Kevin J Pease
WB0JZG Mt Juliet, TN.
mm1001.theporch.com

From boatanchors@theporch.com Mon May 1 15:22:28 1995
Date: Mon, 1 May 1995 10:22:28 -0500
Message-Id: <950501110942_102578833@aol.com>
From: CarlHeintz@aol.com
Subject: SX-100 for sale

Hallicrafters SX100
In outstanding original condition, with original manual, the only thing added to this is a little dust (just a little) as the result of sitting in a closet for 30 years. Asking $400 (steep, but worth it)

From boatanchors@theporch.com Mon May 1 19:33:46 1995
Date: Mon, 1 May 1995 14:33:46 -0500
Message-Id: <199505011925.MAA29081@netcom8.netcom.com>
From: rmccarty@netcom.com (roger mccarty)
Subject: Thanks

Thanks to all whom responded to my questions on the Galaxys and the Collins 30L1.

Roger KD6CC

From boatanchors@theporch.com Sun Apr 30 23:36:22 1995
Date: Sun, 30 Apr 1995 18:36:22 -0500
Message-Id: <Pine.SUN.3.91.950429125612.24922A-100000@booz.bah.com>
From: k1zat@bah.com
Subject: Wanted --

Does anyone have a Swan TB-4H or TB-3H beam available for parts? They were made in the late 60's/early 70's.
I need the boom to element mounting for the driven element.

jd

From boatanchors@theporch.com Sun Apr 30 23:14:22 1995
Date: Sun, 30 Apr 1995 18:14:22 -0500
Message-Id: <199504291529.IAA24793@netcom9.netcom.com>
From: rmccarty@netcom.com (roger mccarty)
Subject: WRL Galaxy Questions

Are there any Anchorites experienced with the GALAXY line of transceivers?

I have 6 of them, from the Galaxy V original to the GT-550A that I am trying real hard to restore, and it seems that each has the same problem of low receive sensitivity. I wonder if there is a common malady that I should be aware of that someone could help with?

In lieu of direct experience with the Galaxys, I am still learning the RF troubleshooting techniques, and fall short in knowledge of what kind of gain to expect from each stage. ANybody gota rule of thumb?

In lieu of that, guess I'm gonna have to read <grin>

Thanks

Roger KD6CC

From boatanchors@theporch.com Mon May 1 13:54:27 1995
Date: Mon, 1 May 1995 08:54:27 -0500
Message-Id: <Pine.3.89.9504302201.A3054-0100000-0100000@ozarks>
From: "C. Frank Gilmore" <fgilmore@ozarks.sgcl.lib.mo.us>
Subject: Re: WRL Galaxy Questions

On Sun, 30 Apr 1995, roger mccarty wrote:

> Are there any Anchorites experienced with the GALAXY line of transceivers?
>
> I have 6 of them, from the Galaxy V original to the GT-550A that I am
> trying real hard to restore, and it seems that each has the same problem
> of low receive sensitivity. I wonder if there is a common malady that I
> should be aware of that someone could help with?
>
> In lieu of direct experience with the Galaxys, I am still learning the RF
> troubleshooting techniques, and fall short in knowledge of what kind of
> gain to expect from each stage. ANybody gota rule of thumb?
>
> In lieu of that, guess I'm gonna have to read <grin>
>
> Thanks
>
> Roger KD6CC
>
>

Roger low sensitivity was a very common problem, going back to the Galaxy III. As you may know they produced numerous fixed channel commercial radios based on the Galaxy design of the day...whichever was in

production, but sales were poor due to the performance. Was at a hamfest a few years ago and a guy had seven or more four channel Galaxys that looked average to poor. He said they all worked to some extent and had been used by some government (state) entity. No manuals of course.
...
There were some nice features to the Galaxy line but they just didn't cut it for sensitivity and most I had occasion to work on drifted in excess of normal for the era.

73, Frank
de K0JPJ ex-W5PVX ...-.-

From boatanchors@theporch.com Mon May 1 20:40:19 1995
Date: Mon, 1 May 1995 15:40:19 -0500
Message-Id: <9505012014.AA23451@speckle.ncsl.nist.gov>
From: morgan@speckle.ncsl.nist.gov (Roy Morgan)
Subject: WTB BC-348: The Insides!

Anchorites,

I'd like to find a BC-348 in need of cabinet, front panel, knobs, and the like.

I do need: the chassis and most internal mechanicals and all electricals.

(The one I have was "converted" to that OTHER state - not hollow. HORRORS!)

--
Roy --

Roy Morgan / Tech A-266 / NIST / Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 Internet: morgan@speckle.ncsl.nist.gov
---

From boatanchors@theporch.com Mon May 1 00:22:56 1995
Date: Sun, 30 Apr 1995 19:22:56 -0500
Message-Id: <Pine.3.89.9504300053.A24154-0100000@netcom13>
From: "Hal R. Waite" <halwaite@netcom.com>
Subject: WTB: HP 410C VTVM with RF Probe Intact

Looking for the above model or perhaps an earlier one if the price is right. My boatanchors need troubleshooting on the receive AGC line.

Hal K4GFI/7 Las Vegas halwaite@netcom.com

From boatanchors@theporch.com Sun Apr 30 23:21:54 1995
Date: Sun, 30 Apr 1995 18:21:54 -0500
Message-Id: <Pine.SUN.3.91.950429083404.16240B-100000@coyote.rain.org>
From: "Ray L. Mote" <rmote@rain.org>
Subject: WW2 docs needed

Anybody have/seen the following?

T.O. 16-1-48 AIRCRAFT RADIO AND RADAR EQUIPMENT - PLUGS AND SOCKETS, dated 19 November 1943 (or any date!)

C.O. 16-35ID56-21 MODIFICATION TO PROVIDE FOR OPERATION IN CONJUNCTION WITH NOSMEAGLE EQUIPMENT - ID-56/APQ-7, dated 31 July 1945. (I've always wondered what an "Interim Nosmeagle" was, since seeing reference to a spare parts list for it! What a wonderful, weird creature a Nosmeagle must be....)

T.O. 16-40RC55-2 MAINTENANCE INSTRUCTIONS, RC-54-B AND RC-55-B (This was the single-meter/function switch version of the Command Set test sets!)

T.O. 16-40RC55-3 MAINTENANCE INSTRUCTIONS, RC-54-C AND RC-55-C (Another single-meter version of the above). I NEED DOCS FOR MY METERS!!

T.O. 16-45-42 APPLICATION OF JOINT ARMY-NAVY NOMENCLATURE MARKING - ATC AND ATC-1, dated 12 March 1945. (Presumably, they remarked these to read AN/ART-13.)

Can anyone help? Ray Mote, W6RIC (805) 985-6048.